

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Kazuhito Kojima et al.

Application No.: 10/606,184

Confirmation No.: 1598

Filed: June 26, 2003

Art Unit: 2166

For: DATABASE SYSTEM AND A METHOD OF
DATA RETRIEVAL FROM THE SYSTEM

Examiner: S. F. Lin

REPLY BRIEF

MS Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

This Reply Brief is filed in response to the Examiner's Answer mailed July 1, 2008. Appellant has chosen to limit this reply the errors in the rejection of independent claims 1 and claim 9. More specifically, the errors in the attribution of certain subject matter to the cited references of U.S. Patent No. 5,920,856 (Syeda-Mahmood), U.S. Patent No. 5,913,208 (Brown et al.) and U.S. Patent No. 6,038,610 (Belfiore et al.), involved in the rejections of claims 20-27. However, the rejections not specifically mentioned herein are also subject to the same infirmities. Appellant respectfully submits the Examiner's Answer has: (1) ignored subject matter specifically defined in the claims; (2) has alleged subject matter is disclosed in the references when it is not disclosed therein.

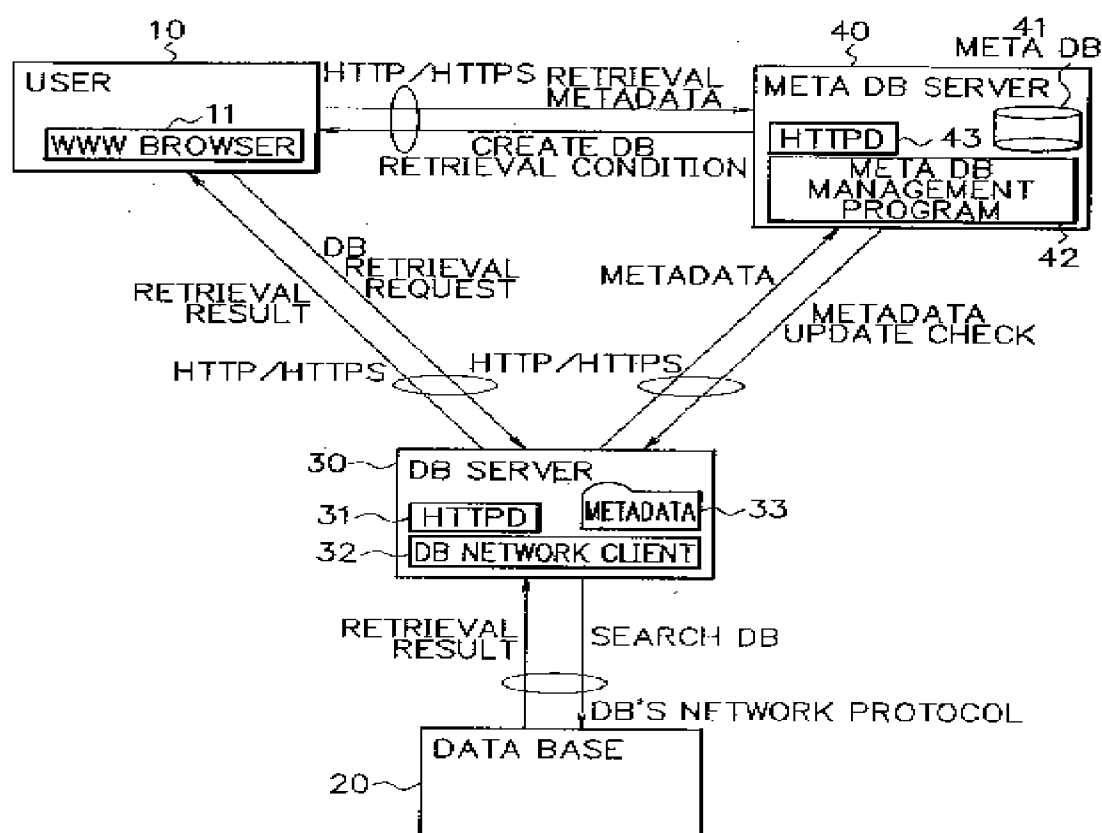
INTRODUCTION

The present invention of Kojima et al. discloses a method of data retrieval using metadata, pertaining to real data stored in at least one database (DB) , that is collected and managed in a single meta DB server, wherein the metadata that match a

retrieval request are extracted by searching of the meta DB server and bypassing the server of the at least one database.¹ In particular, as shown in **FIG. 2** below, Kojima et al. discloses a user terminal **10** that:

- (1) inputs a keyword for search; issues a retrieval request and displays a retrieval result;
- (2) has a database (DB) **20** which stores actual data;
- (3) has a DB server **30** further comprising a retrieval request receiving module **31**, a retrieval executing module **32**;
- (4) has a DB network client **32**; and
- (5) has a meta DB server **40**.²

FIG. 2



¹ U.S. Patent Publication No. US 2004/0010493 at **ABSTRACT** and claims.

² *Id.* at **FIG. 2**, paragraphs [0069] to [0073].

More specifically, Kojima et al., as recited in independent claim 1 below and as similarly recited in independent claim 9, claims:

[A] method of data retrieval by a user from a distributed database, comprising:

saving metadata pertaining to real data stored in databases distributed on a network in first servers distributed on the network associated with each of said databases (i.e., see **FIG. 4, ref. S3, S4; page 9, lines 18-19; page 26, lines 16-21**);

collecting metadata saved in said first servers and storing said metadata in a metadata database of a second server without storing the real data represented by said metadata (i.e., see **FIG. 4, ref. S3, S4; page 9, lines 17-18; page 26, lines 16-21**);

extracting metadata that matches a user retrieval request from a user terminal by searching metadata stored in said metadata database, and transmitting a retrieval result including information of a location of the first server saving the metadata that matches said user retrieval request, to said user terminal (i.e., see **FIG. 4, ref. S6; page 9, lines 19-21, page 27, lines 8-9**);

inputting a real data retrieval condition for the database on the basis of the retrieval result of the metadata database transmitted to said user terminal (i.e., see **FIG. 4, ref. S7; page 9, lines 22-23; page 27, lines 9-11**);

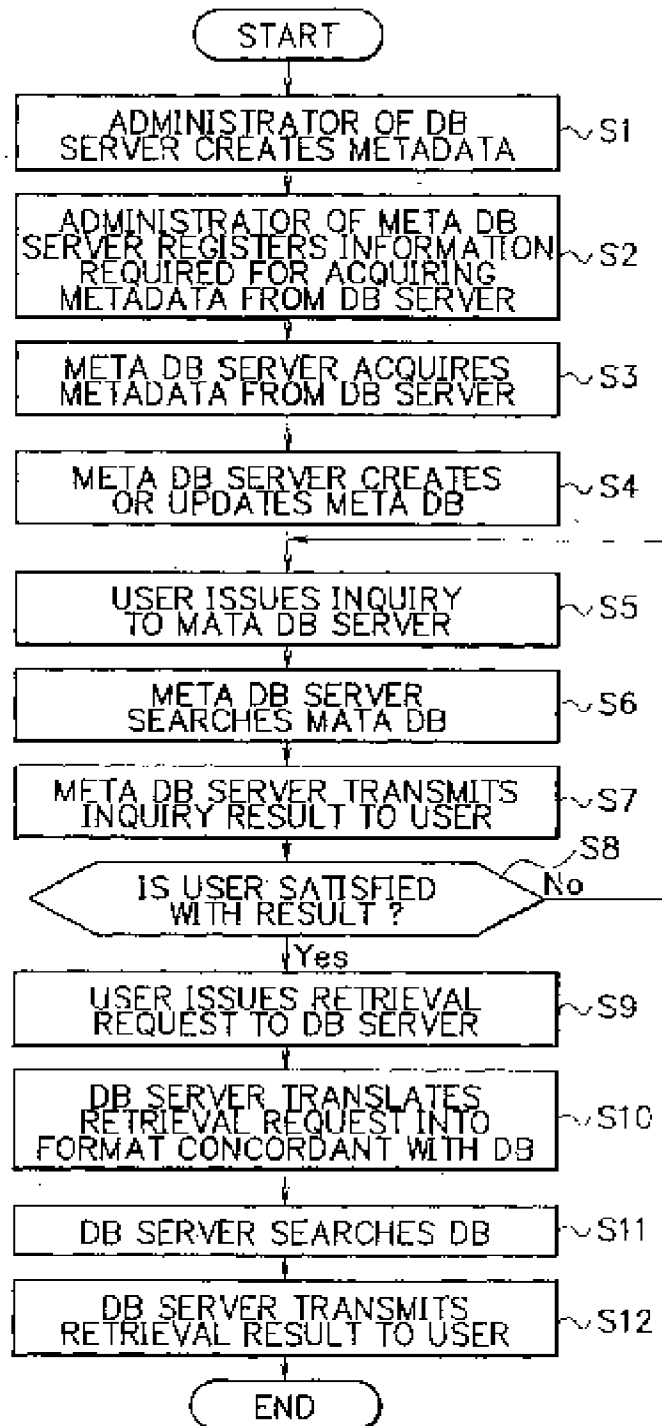
issuing a real data retrieval condition from said user terminal to the first server on the basis of said information of a location of the first server (i.e., see **FIG. 4, S9; page 9, lines 21-22; page 27, lines 16-18**),

wherein said real data retrieval condition is issued to said first server by bypassing said second server (i.e., see **FIG. 4; page 26, lines 16-21**); and

retrieving, by the first server, the real data from the corresponding database after converting said real data retrieval condition into a format which is concordant with the database (i.e., see **FIG. 4, S10; page 28, lines 1-2**).

A flow diagram of the method of the invention of claims 1 and 9 is shown below in **FIG. 4**.

FIG. 4



In arguing for maintaining the rejection of claims 1 and 9, the outstanding Examiner's Answer cites Syeda-Mahmood, which discloses a system for selecting multimedia databases

over networks that include a network server that interfaces a client with selected database sites from a plurality of databases.³ However, the outstanding Examiner's Answer admits deficiencies in this reference by stating that Syeda-Mahmood does not explicitly disclose:

(1) saving metadata pertaining to real data stored in databases in first servers associated with said databases and collecting saved metadata;⁴ and

(2) that search agent/engine and meta database are located in different servers and the real data retrieval is issued by bypassing the second server.⁵

The outstanding Examiner's answer attempts to overcome the deficiencies of Syeda-Mahmood discussed above in item (1) and item (2) with Belfiore et al. and Brown et al., respectively. However, it is respectfully submitted that neither Belfiore et al. nor Brown et al., can overcome all of the deficiencies of Syeda-Mahmood, as discussed below.

Belfiore et al. discloses storage of sitemaps to hold content-related information about hypertext documents stored at a server site.⁶ In particular, the outstanding Examiner's Answer cites **FIG. 12** of Belfiore et al., which is a flowchart illustrating the steps that are performed when a web crawler of the invention uses sitemap files. Specifically, **FIG. 12** shows and Belfiore et al. discloses a swift web crawler visits the site that has a sitemap file (i.e., step **100**); the web crawler then locates the sitemap file at the default location or at the location specified within the fields of the object tag (i.e., step **102**); the web crawler extracts the contents from the sitemap file (i.e., step **104**); and uses the information to build a hierarchical index to the site (step **106**).⁷

³ Syeda-Mahmood at ABSTRACT.

⁴ Examiner's Answer at page 5, lines 18-19.

⁵ *Id.* at page 6, lines 11-12.

⁶ Belfiore et al. at ABSTRACT.

⁷ *Id.* at **FIG. 12**, column 12, lines 57-67.

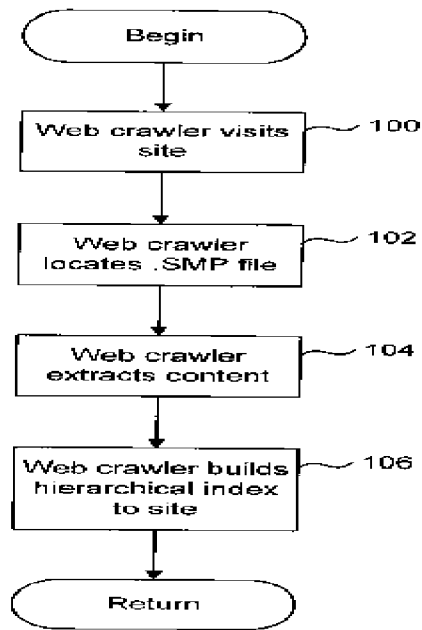


Fig. 12

However, it is respectfully submitted that the disclosure by Belfiore et al. does *not* disclose the following limitation recited in claim 1 as:

saving metadata pertaining to real data stored in databases distributed on a network in first servers distributed on the network associated with each of said databases (i.e., see application at **FIG. 4, ref. S3, S4; page 9, lines 18-19; page 26, lines 16-21**); and

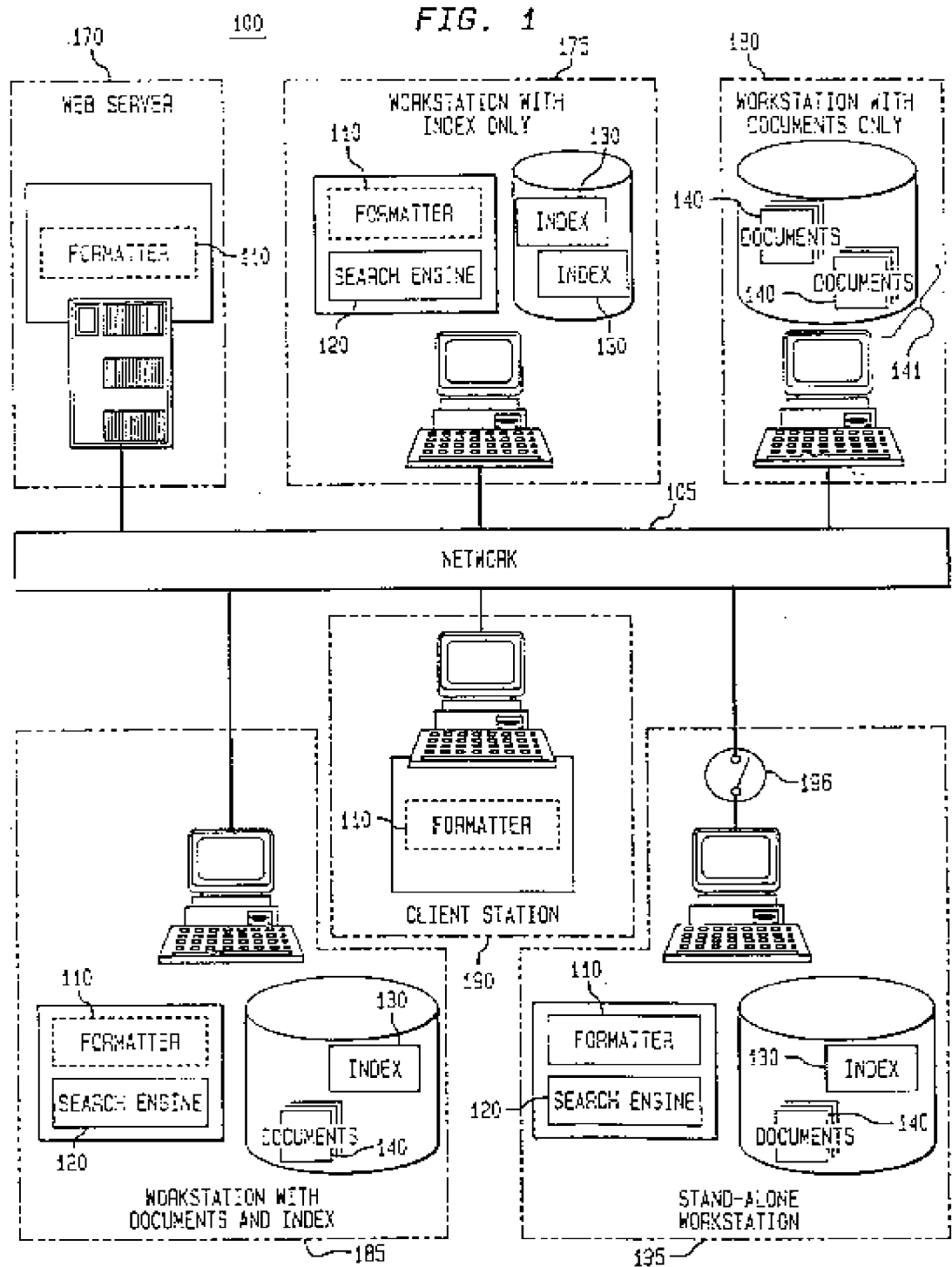
collecting metadata saved in said first servers and storing said metadata in a metadata database of a second server without storing the real data represented by said metadata (i.e., see application at **FIG. 4, ref. S3, S4; page 9, lines 17-18; page 26, lines 16-21**).

Claim 9 recites similar language. That is, Belfiore et al. cannot overcome all of the deficiencies of Seyda-Mahmood discussed in item (1) above and does not disclose all of the explicit limitations recited in claims 1 and 9.

Brown et al. discloses identifying duplicate documents from search results without comparing document content.⁸ In particular, **FIG. 1** of Brown et al. below shows a computing environment or system **100** comprises one or more general purpose computers **170, 175, 180, 185, 190**, and **195** interconnected by a network **105**. More specifically, Brown et al. discloses that to find a particular document in the environment, a query is submitted for processing to a search engine **120** running on the computers **170, 175, 180, 185, 190**, and **195**; the search engine **120** makes use of an index **130** (i.e., *see* **FIG. 2** of Brown et al.) to identify documents that are relevant to the query; an index is created at indexing time by the search engine **120** for a particular set of documents in the environment (i.e., a document collection 141); and the relevant documents are returned by the search engine **120** in the form of a hit-list (i.e., *see* **FIG. 3B** of Brown et al.).⁹

⁸ Brown et al. at ABSTRACT.

⁹ *Id.* at **FIG. 1**, column 4, line 38 to column 5, line 5.



However, it is respectfully submitted that the disclosure by Brown et al. does *not* disclose the following limitation recited in claim 1 as:

issuing a real data retrieval condition from said user terminal to the first server on the basis of said information of a

location of the first server (i.e., *see* application at **FIG. 4, S9; page 9, lines 21-22; page 27, lines 16-18**),
wherein said real data retrieval condition is issued to
said first server by bypassing said second server (i.e., *see*
application at **FIG. 4; page 26, lines 16-21**).

Claim 9 recites similar language. That is, Brown et al. cannot overcome all of the deficiencies of Seyda-Mahmood discussed in item (2) above and does not disclose all of the explicit limitations recited in independent claims 1 and 9.

Thus, based on the above discussion, neither Belfiore et al. nor Brown et al. can overcome all of the deficiencies of Seyda-Mahmood in disclosing independent claims 1 and 9. Therefore, it is respectfully submitted that none of Seyda-Mahmood, Belfiore et al. or Brown et al., whether taken alone or in combination, disclose, suggest or make obvious the claimed invention and thus, independent claims 1 and 9, and claims dependent thereon, patentably distinguish thereover.

Conclusion

For the reasons discussed above, Appellant requests reversal of the rejection of claim 1 and 9, and claims dependent thereon (i.e., claims 7, 8, 10, 11).

Dated: September 2, 2008

Respectfully submitted,

By /Myron K. Wyche/

Myron K. Wyche

Registration No.: 47,341

CONNOLLY BOVE LODGE & HUTZ LLP

1990 M Street, N.W., Suite 800

Washington, DC 20036-3425

(202) 331-7111

(202) 293-6229 (Fax)

Agent for Applicant